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EXAMINER

LE, MICHAEL

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/824,437	Applicant(s) BRUNNABEND ET AL.	
	Examiner MICHAEL LE	Art Unit 2163	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 May 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 and 21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 and 21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Summary and Status of Claims

1. This Office Action is in response to Applicant's reply filed May 29, 2009.
2. Claim 21 is new.
3. Claims 1-19 and 21 are pending.
4. Claim 8 is rejected under 35 U.S.C. 112, second paragraph.
5. Claims 1-8 and 21 are rejected under 35 U.S.C. 101.
6. Claims 1-19 and 21 are rejected under 35 U.S.C. 102(e) as being anticipated by Moraes et al. (US Patent Pub 2005/0033777) of record.
7. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Specification

8. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: The computer readable medium recited in claims 14-18 is not mentioned or described in the Specification. As a result, the apparent meaning and scope of "computer readable medium" is unclear as required by MPEP § 608.01(o).

Claim Objections

9. Claim 21 is objected to because of the following informalities:

Art Unit: 2163

10. Claim 21, line 7 “calculated” should be --calculate--.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

11. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

12. Claim 8 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

13. Claim 8 recites "- jump to- feature" in line 3. The dashes make the limitation unclear as to the meaning. Applicant should remove the dashes.

14. The prior art rejection to claim 8 below are made as best understood in light of the rejection under 35 U.S.C. 112, second paragraph addressed above.

Claim Rejections - 35 USC § 101

15. **Claims 1-8 and 21 are rejected under 35 U.S.C. 101** because the claimed invention is directed to non-statutory subject matter.

16. The basis of this rejection is set forth in a test of whether the invention is categorized as a process, machine, manufacture or composition of matter.

17. In the present case, **claims 1-8** recite a system that does not contain components defining the physical structure of the system. For a system claim to be statutory, it must recite physical components that define the physical structure of the system, thereby allowing the system to be

Art Unit: 2163

categorized in one of the statutory categories of invention. Claim 1 recites a system that is comprised of software components. While the data flow manager component recites the functionality "to store a read history in a memory device," it is merely a functionality of the data flow manager component. The hardware memory device is not claimed as a component of the system. For these reasons, the system of claims 1-8 is comprised of software per se and as a result cannot be properly categorized under one of the statutory categories of invention.

18. **Claim 21** similarly recites a system comprising software components. The data flow manager component recited in claim 21 recites the functionality of storing and identifying in a memory device, however, like the system of claim 1, the memory device is not a component of the claimed system.

19. To expedite a complete examination of the instant application, the claims rejected under 35 U.S.C. 101 (nonstatutory) above are further rejected as set forth below in anticipation of applicant amending these claims to place them within the four statutory categories of invention.

Claim Rejections - 35 USC § 102

20. **Claims 1-19 and 21 are rejected under 35 U.S.C. 102(e) as being anticipated by Moraes et al. (US Patent Pub 2005/0033777) (Moraes) of record.**

21. In regards to **claim 1**, Moraes discloses a correction server system, comprising:

- a. an analyzer to calculate an analytical result using at least one data entity stored in a database (Moraes at para. 0054; para. 0096)¹;

¹ Observer module (i.e., analyzer) is used to observe an initial baseline value of data items (i.e., calculate an analytical result using at least one data entity from the database).

Art Unit: 2163

b. a data flow manager, responsive to read requests from agents to the database, to store a read history in a memory device identifying a relationship between the data entity being read and the analytical result (Moraes at para. 0100 “DBDir”); and

c. a correction server that, when corrections are made to the database, identifies corrected entities in a corrected entity log (Moraes at para. 0054)² and compares the corrected entity log against the read history to identify analytical results rendered possibly inconsistent due to the correction. Moraes at para. 0102.

22. In regards to **claim 2**, Moraes discloses the correction server system of claim 1, wherein the data flow manager generates a new entity from the database entity that is read and stores it in the database. Moraes at para. 0103.

23. In regards to **claim 3**, Moraes discloses the correction server system of claim 1, wherein the read history log identifies leading and dependent entities, a leading entity being a data entity that is read by a component and a dependent entity being a new object entity created from the data entity that is read. Moraes at Fig. 7, element 704; para. 0083.

24. In regards to **claim 4**, Moraes discloses the correction server system of claim 1, wherein the read history stores pairs of entity identifiers. Moraes at Fig. 7, element 704; para. 0083.

25. In regards to **claim 5**, Moraes discloses the correction server system of claim 1, wherein the correction server receives correction data that includes an identifier of a data entity being corrected, an indication of fields within the data entity that are being changed and an identification of field values that are changed. Moraes at Fig. 7, element 703; para. 0077.

² Session module (i.e., correction server) organizes all changes to data items (i.e., identifies corrected entities) into change sessions (i.e., corrected entity log).

Art Unit: 2163

26. In regards to **claim 6**, Moraes discloses the correction server system of claim 5, wherein the corrected entity log stores all the correction data noted in claim 5. Moraes at para. Fig. 7, element 703; para. 0077.

27. In regards to **claim 7**, Moraes discloses the correction server of claim 1, wherein the correction server further comprises a filtering agent that compares correction data to filtering criterion and stores the correction data in the corrected entity log only if the correction data matches the filtering criterion. Moraes at para. 0055³.

28. In regards to **claim 8**, Moraes discloses the correction server system of claim 1, wherein the correction server further includes a user interface that permits review and display of the corrected entity log (Moraes at para. 0056), the user interface providing a jump to feature that, when activated with respect to an entry of the corrected entity log causes a data entity referenced by the entry to be retrieved and displayed. Moraes at para. 0044; Fig. 18, element 18-7; para. 0138; para. 0140.

29. In regards to **claim 9**, Moraes discloses a computer-implemented correction management method comprising:

- a. responsive to a request to correct a first database entity stored in a database, creating a second database entry that is a corrected copy of the first database entity (Moraes at para. 0055; para. 0075-6),
- b. storing an entry in a corrected entity log that identifies the first database entity (Moraes at para. 0077),

³ The recorder module validates all processes to ensure they fall within the policies (i.e., filtering criterion) of the tracer) and only traces if it is authorized (i.e., stores correction data only if correction data matches the filtering criterion).

Art Unit: 2163

- c. comparing the corrected entity log entry against a read history log identifying whether entities in the database have been used to calculate an analytical result (Moraes at para. 0142),
 - d. if the entry matches an entry from the read history log, identifying a dependent database entity from the read history log as a possibly inconsistent entity (Moraes at para. 0054; para. 0102; para. 0194), the dependent database entity storing an analytical result calculated from the first database entity. Moraes at para. 0054; para. 0096.
30. In regards to **claim 10**, Moraes discloses the correction management method of claim 9, wherein the read history log stores paired leading entity identifiers and dependent entity identifiers relating to the prior accesses. Moraes at Fig. 7, element 704; para. 0083.
31. In regards to **claim 11**, Moraes discloses the correction management method of claim 10, wherein the comparison is made between an entity identifier from the corrected entity log and the leading entity identifier from the read history log. Moraes at Fig. 7, element 704; para. 0083.
32. In regards to **claim 12**, Moraes discloses the correction management method of claim 9, wherein the second database entity includes an entity identifier of the first database entity and an indication of fields within the first database entity being corrected. Moraes at Moraes at Fig. 7, element 704; para. 0083.
33. In regards to **claim 13**, Moraes discloses the correction management method of claim 9, further comprising comparing the correction request to filtering criteria and performing the

Art Unit: 2163

storing and comparing unless the correction request does not satisfy the filtering criteria. Moraes at para. 0055⁴.

34. **Claims 14-16** are essentially claims 9-11, respectively, in the form of a computer readable medium having a program stored thereon and are therefore rejected for the same reasons. Moraes discloses a computer readable medium. Moraes at para. 0041.

35. In regards to **claim 17**, Moraes discloses the medium of claim 14, wherein the correction request includes an entity identifier of the first database entity and an indication of fields within the first database entity being corrected. Moraes at para. 0055.

36. In regards to **claim 18**, Moraes discloses the medium of claim 14, further comprising comparing the request to correct the first database entity to filtering criteria and performing the storing and comparing unless the request to correct the first database entity does not satisfy the filtering criteria. Moraes at para. 0055⁵.

37. In regards to **claim 19**, Moraes discloses a system for identifying inconsistent data in a computer system comprising:

- a. a first database to store data generated during operation of the computer system (Moraes at Fig. 3A, element 301);
- b. a correction manager to manage corrections performed in the system (Moraes at Fig. 3A, element 300; para. 0047-8), the correction manager further comprising:

⁴ The recorder module validates all processes to ensure they fall within the policies (i.e., filtering criterion) of the tracer) and only traces if it is authorized (i.e., stores correction data only if correction data matches the filtering criterion).

⁵ The recorder module validates all processes to ensure they fall within the policies (i.e., filtering criterion) of the tracer) and only traces if it is authorized (i.e., stores correction data only if correction data matches the filtering criterion).

Art Unit: 2163

- i. a second database to store a list of corrected data entries in the first database (Moraes at para. Fig. 3A, element 301; para. 0054); and
- ii. a third database to store a list of uncorrected data entries identified as potentially inconsistent due to a correction performed on an entity listed in the second database (Moraes at Fig. 3A, element 301; para. 0055); and
- iii. a data flow manager to manage access to the first database, the second database, and the third database by an analyzer (Moraes at para. 0054; para. 0096), the analyzer to provide analytical results calculated from data stored in the first database to an operator of the system. Moraes at para. 0054; para. 0096.

38. In regards to **claim 21**, Moraes discloses a correction server system, comprising:

- a. an analyzer to calculate an analytical result using a plurality of data entries stored in a database (Moraes at para. 0054; para. 0096)⁶;
- b. a data flow manager logging requests to retrieve data entries from the database (Moraes at para. 0056), logging requests to store data entries in the database (Moraes at para. 0055), and identifying which of the plurality of entries in the database were used to calculate the analytical result, in a memory device (Moraes at paras. 0100), and
- c. a correction server that, when a data entry used to calculate the analytical result has been changed, identifies analytical results rendered possibly inconsistent due to the correction. Moraes at para. 0102.

⁶ Observer module (i.e., analyzer) is used to observe an initial baseline value of data items (i.e., calculate an analytical result using at least one data entity from the database).

Response to Amendment

Objection to claims 2, 7, 8, 12, and 18 for Minor Informalities

39. Applicant's amendment to claims 2, 7, 8, 12, and 18 to address the minor informalities is acknowledged. Consequently, the objection to claims 2, 7, 8, 12, and 18 is withdrawn.

Rejection of Claim 2 under 35 U.S.C 112, First Paragraph

40. Applicant's amendment to claim 2 is acknowledged. The rejection to claim 2 under 35 U.S.C. 112, first paragraph is withdrawn.

Rejection of Claims 2, 3, 5, 6, 8, and 12 under 35 U.S.C 112, Second Paragraph

41. Applicant's amendment to claims 2, 3, 5, 6, 8, and 12 is acknowledged. The rejection to claims 2, 3, 5, 6, and 12 under 35 U.S.C. 112, second paragraph is withdrawn. In regards to claim 8, Applicant removed the quotations around the "jump to" limitation and replaced them with '-' characters. The replacement does not render the scope of the limitation any clearer allowing one of ordinary skill to properly ascertain the scope of the claim. In addition, Applicant does not provide any reasoning or explanation for the replacement or what Applicant intends the dash characters to mean. For these reasons, the rejection of claim 8 under 35 U.S.C. 112, second paragraph is maintained.

Rejection of Claims 1-8 and 14-19 under 35 U.S.C 101

42. Applicant's amendment to claims 1-8 and 14-19 is acknowledged. Consequently, the rejection to claims 14-19 under 35 U.S.C. 101 is withdrawn. In regards to claims 1-8, while

Art Unit: 2163

Applicant included the limitation “in a memory device” in amended claim 1, the limitation is simply a feature functionality of the software component of the system. The memory device itself is not a component of the system. The system of claims 1-8 remains a software system, which cannot be properly categorized under a statutory category of invention. As a result, the rejection of claims 1-8 under 35 U.S.C. 101 is maintained.

Response to Arguments

Specification

43. Applicant’s arguments regarding the objection to the Specification have been fully considered but are unpersuasive. The objection to the Specification is for lack of antecedent basis for the limitation “computer readable medium.” Applicant argues that since the original claims recited "computer readable medium" therefore, there is proper antecedent basis, citing MPEP 608.01(l). While this is true, the cited section goes on to state that even if the claims recites a particular limitation, the drawings and description can still be objected to if they are lacking in description of the limitation. In this case, there is insufficient description of a “computer readable medium” in the specification. Pursuant to MPEP 608.01(o), the meaning of every term in any of the claims should be apparent from the descriptive portion of the specification with clear disclosure. The meaning of "computer readable medium" is not apparent resulting in the objection to the Specification. Consequently, objection to the specification is maintained.

Rejection of claims 1-19 under 35 U.S.C. 102(e)

Art Unit: 2163

44. Applicant's arguments in regards to the rejections to claims 1-19 under 35 U.S.C. 102(e), have been fully considered but they are unpersuasive. In regards to claims 1-8, Applicant alleges Moraes fails to disclose (1) "an analyzer to calculate an analytical result using at least one data entity stored in a database" and (2) "a correction sever ... to identify analytical results rendered possibly inconsistent due to the correction" (Remarks at 7.) The Examiner respectfully disagrees. In regards to limitation (1), Moraes disclose an observer modules that constructs (i.e., calculates) a baseline of initial information (i.e., an analytical result) about all items that the change tracer process is required to be attentive to (i.e., at least one data entity stored in a database). Moraes at para. 0096. Applicant argues that the observer module does not calculate an analytical result and instead only observes (Remarks at 8.) Applicant seems to have a narrow interpretation of "calculate an analytical result." The Examiner gives the reasonably broad interpretation of the limitation as a determination of a value used for analysis. Here, the observer module constructs (i.e., calculates) a baseline value for database items that is later analyzed to determine if database items have changed (i.e., a value used for analysis). Moraes discloses limitation (1) for at least these reasons. In regards to limitation (2), Moraes discloses a session module that organizes all changes to data items into change sessions which are stored in the change tracer database. Moraes at para. 0054. Further, Moraes discloses that a current item (i.e., corrected entity in a corrected entity log) is compared to a DBDir list (i.e., read history log) to identify if the value of the current item is different from the baseline value (i.e., if the analytical result is rendered possibly inconsistent due to the correction). Moraes at para. 0102. As discussed above, a baseline value is interpreted as an analytical result. If the current item's value is different from the baseline value, then it is determined that there is an inconsistency due to the

Art Unit: 2163

correction (i.e., the change of the item's value). Moraes discloses limitation (2) for at least these reasons.

45. In regards to claims 9-13, Applicant alleges Moraes fails to disclose (1) "identifying whether entities in the database have been used to calculate an analytical result" and (2) "identifying a dependent database entity from the read history log as a possibly inconsistent entity, the dependent database entity storing the analytical result calculated from the first entity" (Remarks at 8.) The Examiner respectfully disagrees. These limitations are similar to those addressed above. Therefore, Moraes discloses both limitations for at least the same reasons.

46. In regards to claims 14-18, Applicant alleges Moraes fails to disclose (1) "identifying whether entities in the database have been used to calculate an analytical result" and (2) "identify a dependent database entity from the read history log as a possibly inconsistent entity, the dependent database entity storing an analytical result calculated from the first database entity" (Remarks at 9.) The Examiner respectfully disagrees. These limitations are similar to those addressed above. Therefore, Moraes discloses both limitations for at least the same reasons.

47. In regards to claim 19, Applicant alleges Moraes fails to disclose (1) "a third database to store a list of uncorrected data entries identified as potentially inconsistent due to a correction performed on an entity listed in the second database" and (2) "[an] ... analyzer to provide analytical results calculated from Data stored in the first database to an operator of the system and storing the analytical results in the third database" (Remarks at 9.) Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references. Applicant's sole reasoning is that Moraes

Art Unit: 2163

merely discusses observing if a data item has changed (Remarks at 9.) This argument has been addressed above.

48. In regards to new claim 21, Applicant alleges Moraes fails to disclose (1) “an analyzer to calculate an analytical result using a plurality of data entries stored in a database” and (2) “a correction server that, when a data entry used to calculate the analytical results has been changed, identifies analytical results rendered possibly inconsistent due to the correction” (Remarks at 10-11.) The Examiner respectfully disagrees. Again, Applicant’s arguments amount to a mere general allegation of patentability without providing specific points as to how the language of the claims distinguishes over the prior art. Moreover, the limitations at issue in claim 21 are similar to those already addressed above with respect to claim 1. Therefore, they are both disclosed by Moraes for at least the same reasons.

49. Consequently, the rejection to claims 1-19 under 35 U.S.C. 102(e) is maintained.

Conclusion

50. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

51. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

Art Unit: 2163

however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

52. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Le whose telephone number is 571-272-7970. The examiner can normally be reached on Mon-Thurs : 9:30am-6pm, Fri: 8am-4:30pm.

53. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on 571-272-1834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

54. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Michael Le/
Examiner, Art Unit 2163

/Wilson Lee/
Primary Examiner, Art Unit 2163

8-3-09